

## STRUCTURE OF THE STUDY PROGRAM

**Table 4.1. Schedule of the courses by semesters and years of study**

No.	Course code	Course Title	Semester	Weekly fund of lessons		ECTS
				L	E	
<b>FIRST YEAR</b>						
1	23ISE21A010	Methodology of Scientific Research Work	1	2	1	6
2	23ISE21A020	Applied Software Engineering	1	2	1	6
3	23ISE21A030	Advanced Algorithms and Data Structures	1	2	1	6
4	23ISE21A040	Discrete Mathematics and its Application in Programming	1	2	1	6
5	23ISE21BXX0	Elective Course	1	2	1	6
6	23ISE22A010	Advanced Databases	2	2	1	6
7	23ISE22A020	Software Testing	2	2	1	6
8	23ISE22A030	Machine Learning Algorithms	2	2	1	6
9	23ISE22A040	Human – Computer Interface	2	2	1	6
10	23ISE22BXX0	Elective Course	2	2	1	6
Total hours (lectures/exercises ) and ECTS for the year				20	30	60

No.	Course code	Course Title	Semester	Weekly fund of lessons		ECTS
				L	E	
<b>SECOND YEAR</b>						
1	23ISE23A010	Applied Web Programming	3	2	1	6
2	23ISE23A020	Applied Parallel Programming	3	2	1	6
3	23ISE23A030	Software Project Management	3	2	1	6
4	23ISE23A040	Applied Artificial Intelligence	3	2	1	6
5	23ISE23BXX0	Elective Course	3	2	1	6
6	23ISE24A010	Applied Data Science	4	2	1	6
7	23ISE24A020	Individual Software Project	4	2	1	6
8	23ISE24A030	Number Theory and Its Application in Cryptography	4	2	1	6
9	23ISE24A040	Master's Thesis	4	2	1	6
10	23ISE24BXX0	<b>Elective Course</b>	4	2	1	6
Total hours (lectures/exercises ) and ECTS for the year				20	30	60

**Table 4.2. Elective courses of the study program**

Type of elective course	No
Elective courses from the List of Elective Courses proposed by the unit	8
Elective courses provided by the unit from the University's list of elective courses	0

No.	Course code	Course Title	Semester	Weekly fund of lessons		ECTS	Unit
				L	E		
1	23ISE21B050	Object-Oriented Design	1	2	1	6	FIS
2	23ISE21B060	Multimedia Technologies	1	2	1	6	FIS
3	23ISE23A030	Advanced Mobile Application Programming	2	2	1	6	FIS
4	23ISE23A040	Semantic Technologies	2	2	1	6	FIS
5	23ISE23B050	Modeling and Simulations	3	2	1	6	FIS
6	23ISE23B060	Cloud Programming	3	2	1	6	FIS
7	23ISE24B050	Information Systems Management	4	2	1	6	FIS
8	23ISE24B060	Wireless Networks Analysis and Performance	4	2	1	6	FIS
Total:						96	